

What is Claimed is:

1. A protein chip of a S-L-SP form wherein a substrate peptide (SP) is immobilized on a solid substrate (S) by the mediation of a linker protein (L).
2. The protein chip according to claim 1, wherein the linker protein is leptin or malic enzyme.
3. The protein chip according to claim 1, wherein the substrate peptide is fused with the linker protein in the form of a peptide monomer, a dimer of monomer-proline-monomer, or a multimer where monomers are linked to each other by a proline.
4. The protein chip according to claim 3, wherein the peptide monomer is kemptide(SEQ ID NO: 1) or Ab1(SEQ ID NO: 8).
5. The protein chip according to claim 1, wherein the solid substrate is a slide with exposed aldehyde.
6. A method for analyzing the interaction between a reactive protein and its substrate peptide using the protein chip of claim 1 comprises the steps of:
 - (a) adding a reactive protein to the protein chip, the reactive protein showing a specific interaction with the substrate peptide immobilized on the protein chip; and
 - (b) detecting the interaction between the reactive protein and the substrate peptide.
7. The method according to claim 6, wherein the reactive protein is an enzyme or an antibody.

8. The method according to claim 7, wherein the enzyme is protein kinase A or Abl kinase.
9. The method according to claim 6, wherein the step of detecting the interaction
5 between the substrate peptide and the reactive protein is carried out by using a fluorescence labeled antibody.
10. The method according to claim 8, wherein the step of detecting a
phosphorylation of the substrate peptide by kinase is carried out by using a Cy3-
10 labeled anti-phosphorylation serine antibody or a Cy5-labeled anti-phosphorylation tyrosine antibody.